

ABSTRACT

Terminal equipment of a wavelength division multiplexing optical transmission system is provided with a monitoring apparatus for monitoring optical transmission paths with an OTDR. For this monitoring, OTDR probe lights of different wavelengths are allocated to optical fibers and optical amplifier-repeaters, which are elements constituting the optical transmission paths. Further, different wavelengths are allocated to OTDR probe lights between the up link and the downlink. Such a wavelength as makes the wavelength dispersion over the optical transmission paths negative (usually the shorter wavelength side than the zero dispersion wavelength of the optical transmission paths) is allocated to the OTDR probe light for optical fiber monitoring, and a wavelength longer than 1550 nm is allocated to the OTDR probe light for optical amplifier-repeater monitoring.